CLAIMS

1. A portable handheld computing device comprising:

a notification system to alert a user of an event regardless of whether the handheld computing device is on or off; and

the notification system having an external notification mechanism that is activated upon occurrence of the event and that remains active until the user acknowledges the activated mechanism.

2. A portable handheld computing device as recited in claim 1 wherein the external notification mechanism comprises a light.

3. A portable handheld computing device as recited in claim 1 wherein the external notification mechanism comprises a flashing light.

4. A portable handheld computing device as recited in claim 1 wherein the external notification mechanism comprises an audio generator.

5. A portable handheld computing device as recited in claim 1 wherein the external notification mechanism comprises a vibration device.

6. A portable handheld computing device comprising:

a processor;

a display;

an operating system executing on the processor to provide a graphical user interface environment capable of presenting at least one graphical window on the display;

at least one application running on the operating system; and

a notification system that is callable by the application to alert a user of an event, the notification system having a sensory perceptible notification mechanism that is activated as a result of the event to notify the user.

7. A portable handheld computing device as recited in claim 6 wherein the notification mechanism comprises a light.

8. A portable handheld computing device as recited in claim 6 wherein the notification mechanism comprises a dialog box presented on the display.

9. A portable handheld computing device as recited in claim 6 wherein the notification mechanism comprises an audio generator.

10. A portable handheld computing device as recited in claim 6 wherein the notification mechanism comprises a vibration device.

11. A portable handheld computing device as recited in claim 6 wherein the notification system also has a deactivation mechanism to deactivate the notification mechanism.

12. A portable handheld computing device as recited in claim 6 wherein the notification mechanism comprises a light emitting diode (LED) and the notification system further comprises a button integrated with the LED to deactivate the LED.

13. A portable handheld computing device as recited in claim 6 wherein the notification system supports a graphical user interface which enables a user to set notification options specifying how the notification mechanism is to operate.

14. A portable handheld computing device as recited in claim 6 wherein:

the graphical user interface provided by the operating system has a taskbar and the event relates to the application, and

the notification system places a taskbar annunciator in the taskbar, which upon actuation, starts the application responsible for the event.

15. A portable handheld computing device comprising:

a casing; and

a light emitting device mounted externally on the casing, the light emitting device being activated upon occurrence of an event to notify a user.

16. A portable handheld computing device as recited in claim 15, wherein the light emitting device comprises an LED.

17. A portable handheld computing device as recited in claim 15, wherein:

the casing has an upper surface; and

the light emitting device is mounted externally on the upper surface.

18. A portable handheld computing device as recited in claim 15, wherein:

the casing has upper and lower surfaces, opposing front and back side surfaces, and opposing end surfaces, the ends being dimensionally shorter than the front and back side surfaces; and

the light emitting device is positioned on the upper surface and wraps around to one of the end surfaces.

19. A portable handheld computing device as recited in claim 15, wherein:

the casing comprises a base and a lid; and

the light emitting device is mounted externally on the lid.

20. A portable handheld computing device as recited in claim 15, wherein:

the casing comprises a base and a lid that opens and closes relative to the base, the lid having an upper surface and opposing end surfaces; and

the light emitting device is positioned on the upper surface of the lid and wraps around to one of the end surfaces so that the light emitting device is visible when the lid is opened or closed.

21. A portable handheld computing device as recited in claim 15, further comprising a button mounted to the casing to deactivate the light emitting device.

22. A portable handheld computing device as recited in claim 15, wherein the casing comprises a base and a lid, and further comprising a button mounted to the lid to deactivate the light emitting device.

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23. A portable handheld computing device as recited in claim 15, further comprising a button to deactivate the light emitting device, the button being integrated with the light emitting device.

24. A portable handheld computing device comprising:

an external notification mechanism that is activated to notify a user of an event regardless of whether the handheld computing device is turned on or off;

a deactivation mechanism that enables a user to deactivate the notification mechanism; and

the notification mechanism being configured to remain active until the user deactivates the notification mechanism using the deactivate mechanism.

25. A portable handheld computing device as recited in claim 24, wherein the notification mechanism is a sensory perceptible device selected from a group comprising a light, an audio generator, and a vibration device.

26. A portable handheld computing device as recited in claim 24, wherein the deactivation mechanism is a button mounted externally of the handheld computing device.

27. A portable handheld computing device as recited in claim 24, wherein:

the notification mechanism comprises a light emitting diode (LED); and

the deactivation mechanism comprises a button, the button and the LED being integrated as a single component.

28. A portable handheld computing device as recited in claim 27, wherein the integrated LED and button are mounted externally of the handheld computing device.

29. A notification system for a handheld computing device capable of executing one or more applications, comprising:

a notification program callable by an application to schedule user notification events;

a light emitting diode (LED) mounted externally of the handheld computing device to visually alert a user when the event occurs, the LED being coupled to receive power from a power supply of the handheld computing device so that the LED can remain activated even when the handheld computing device is off; and

a deactivation button mounted externally of the handheld computing device to deactivate the LED.

30. A notification system as recited in claim 29, wherein the LED and button are integrated as a single component.

31. A notification system as recited in claim 29, wherein the notification program, in response to actuation of the deactivation button, sets a taskbar annunciator on a display of the handheld computing device that is associated with the application.

32. A notification system as recited in claim 29, wherein the notification program comprises:

a notification manager to manage one or more events, the notification manager generating a command to set a time when the event is scheduled;

an alarm manager to receive the set time command from the notification manager and to generate a set alarm command which informs a clock to set an alarm at the time of the event; and

an interrupt manager to receive an interrupt from the clock when the time of the event arrives and pass the interrupt to the notification manager so that the notification manager can activate the LED.

33. In a portable handheld computing device, an application program interface embodied on a computer-readable medium for creating a user notification that activates at least one sensory perceptible notification mechanism, the application program interface defining parameters comprising a time parameter that specifies when the user notification should occur and a type parameter that references a structure containing information specifying how the sensory perceptible notification mechanism is to be activated.

34. An application program interface as recited in claim 33, further comprising a parameter that identifies an application resident on the handheld computing device that is responsible for the user notification.

35. An operating system for a portable handheld computing device, embodied on a computer-readable medium, comprising an application program interface as recited in claim 33.

36. In a portable handheld computing device having an operating system that provides a graphical user interface environment capable of presenting at least one graphical window on a display and an external notification mechanism comprising at least one of light and an alarm, a notification program executing on the operating system and supporting a graphical user interface which enables a user to set notification options specifying how the light and the alarm are to operate to notify the user.

37. A method for operating a handheld computing device comprising the steps of:

scheduling an event; and

upon occurrence of the event, emitting a light that is visible externally of the computing device.

38. A method as recited in claim 37, further comprising the step of blinking the light.

39. A method as recited in claim 37, wherein the event pertains to an application running on the handheld computing device, the method further comprising the step of displaying an annunciator associated with the application.